

Energy Market and Economic Impacts of a Proposal to Reduce Greenhouse Gas Intensity

Table 2: Summary Energy Market Results for the Reference, Phased Auction, and Full Auction Cases

Projection	2004	2020			2030		
		AEO2006 Reference	Phased Auction	Full Auction	AEO2006 Reference	Phased Auction	Full Auction
Emissions of Greenhouse Gases (million metric tons CO ₂ equivalent)							
Energy-Related Carbon Dioxide	5,900	7,119	6,926	6,913	8,114	7,387	7,358
Other Covered Emissions	259	452	195	195	627	235	235
Total Covered Emissions	6,159	7,571	7,121	7,107	8,742	7,622	7,593
Total Greenhouse Gases	7,122	8,649	8,087	8,073	9,930	8,671	8,641
Emissions Reduction from Reference Case (million metric tons CO ₂ equivalent)							
Energy-Related Carbon Dioxide	-	-	193	206	-	727	757
Other Covered Emissions	-	-	258	258	-	392	392
Nonenergy Offset Credits	-	-	111	111	-	140	140
Carbon Sequestration	-	-	296	-	-	311	-
Total Emissions Reduction	-	-	562	576	-	1,259	1,289
Total (including sequestration)	-	-	858	576	-	1,570	1,289
Allowance Price (2004 Dollars per metric ton CO ₂ equivalent)	-	-	7.15	7.17	-	14.18	14.18
Delivered Energy Prices (2004 dollars per unit indicated) (includes allowance costs)							
Motor Gasoline (per gallon)	1.90	2.08	2.14	2.13	2.19	2.30	2.30
Jet Fuel (per gallon)	1.22	1.42	1.50	1.51	1.56	1.69	1.69
Distillate (per gallon)	1.74	1.93	2.04	2.03	2.06	2.25	2.23
Natural Gas (per thousand cubic feet)	7.74	7.14	7.55	7.55	8.22	9.10	9.09
Residential	10.72	10.48	10.87	10.87	11.67	12.59	12.57
Electric Power	6.07	5.53	5.99	5.96	6.41	7.39	7.39
Coal, Electric Power (per million Btu)	1.36	1.39	2.06	2.06	1.51	2.73	2.73
Electricity (cents per kilowatthour)	7.57	7.25	7.51	7.65	7.51	8.31	8.48
Fossil Energy Consumption (quadrillion Btu)							
Petroleum	40.1	48.1	47.2	47.2	53.6	52.0	52.1
Natural Gas	23.1	27.7	27.4	27.3	27.7	27.9	27.9
Coal	22.5	27.6	26.4	26.4	34.5	27.7	27.4
Electricity Generation (billion kilowatthours)							
Petroleum	120	107	49	48	115	49	48
Natural Gas	702	1,103	1,184	1,166	993	1,190	1,180
Coal	1,977	2,505	2,370	2,362	3,381	2,530	2,500
Nuclear	789	871	871	875	871	1,168	1,156
Renewable	358	515	572	579	559	823	857
Total	3,955	5,108	5,055	5,039	5,926	5,768	5,749

Source: National Energy Modeling System runs AEO2006.D111905A, BL_PHASED7.D112006B, and BL_FULL7.D112006C.